

### **Remarks**

The above Amendments and these Remarks are in reply to the Office Action mailed May 1, 2007.

#### **I. Summary of Examiner's Rejections**

Prior to the Office Action mailed May 1, 2007, Claims 1-49 were pending in the Application. In the Office Action, Claims 5, 13, 21, 32, and 46 were objected to due to various informalities. Claims 1-49 were rejected under 35 U.S.C. §101 as being directed to non-statutory matter. Claims 1-16, 28-35, and 37-49 were provisionally rejected on the ground of non-statutory double patenting over claims 1-35 and 37-38 of co-pending Application No. 10/618,519. Claims 1-49 were rejected under 35 U.S.C. §102(b) as being anticipated by Van Huben et al., (U.S. Patent No. 6,327,594, hereafter Van Huben).

#### **II. Summary of Applicant's Amendments**

The present Response amends Claims 1, 5, 7-10, 12-17, 21, 37, and 45-47, and cancels Claims 3, 11, 18-19, 28-36, 43, and 49, leaving for the Examiner's present consideration Claims 1-2, 4-10, 12-17, 20-27, 37-42, and 44-48. Reconsideration of the Application, as amended, is respectfully requested. Applicant respectfully reserves the right to prosecute any originally presented or canceled claims in a continuing or future application.

#### **III. Objections to the Claims**

In the Office Action mailed May 1, 2007, Claims 5, 13, 21, 32, and 46 were objected to due to various informalities. Accordingly, Claims 5, 13, 21, and 46 have been amended. Claim 32 has also been canceled. Reconsideration thereof is respectfully requested.

#### **IV. Claim Rejections due to Non-Statutory Double Patenting**

In the Office Action mailed May 1, 2007, Claims 1-16, 28-35, and 37-49 were provisionally rejected on the ground of non-statutory double patenting over claims 1-35 and 37-38 of co-pending Application No. 10/618,519. A Terminal Disclaimer is included with the present response, and it is respectfully submitted that the Terminal Disclaimer obviates these rejections due to non-statutory double patenting. Reconsideration thereof is respectfully requested.

**V. Claim Rejections under 35 U.S.C. §101**

In the Office Action mailed May 1, 2007, Claims 1-49 were rejected under 35 U.S.C. §101 as being directed to non-statutory matter.

**Claims 1-2, 4-8, 17, 20-27, 37-42, and 44-48**

It is respectfully submitted that Claims 1-2, 4-8, 17, 20-27, 37-42, and 44-48 are directed toward statutory matter. These claims are directed towards a memory for storing data for access by an application program being executed on a computer system comprising a data structure stored in said memory, which clearly falls under a statutory category, because the claims are plainly directed towards computer hardware, specifically a memory for storing data.

**Claims 9-10 and 12-16**

Claims 9-10 and 12-16 have been amended to be directed toward a computer readable storage medium, in order to exclude the claiming of forms of energy. It is respectfully submitted that Claims 9-10 and 12-16, as amended, are now directed to statutory matter. Reconsideration thereof is respectfully requested.

**Claims 3, 11, 18-19, 28-36, 43, and 49**

Claims 3, 11, 18-19, 28-36, 43, and 49 have been canceled, rendering moot the rejections of these claims.

**VI. Claim Rejections under 35 U.S.C. §102(b)**

In the Office Action mailed May 1, 2007, Claims 1-49 were rejected under 35 U.S.C. §102(b) as being anticipated by Van Huben et al., (U.S. Patent No. 6,327,594, hereafter Van Huben).

**Claim 1**

Claim 1 has been amended by the current Response to more clearly define the embodiment therein. As amended, Claim 1 defines:

1. *(Currently Amended) A memory for storing data for access by an application program being executed on a computer system, comprising:*

*a data structure stored in said memory, the data structure including or referring to:*

- a name;*
- a content repository identifier;*
- a plurality of properties;*
- a plurality of property definitions associated with the plurality of properties; and*
- a reference to a parent data structure;*

*wherein the data structure is logically part of a virtual content repository (VCR), and wherein the VCR represents a plurality of content repositories logically as a single content repository from the application program's viewpoint.*

Claim 1 has been amended to more clearly define the embodiment as comprising a data structure including or referring to a reference to a parent data structure. The data structure is logically part of a virtual content repository, and the virtual content repository represents a plurality of content repositories logically as a single content repository from the application program's viewpoint. Applicant respectfully submits that these features are not disclosed by the cited references.

Van Huben discloses methods for shared data management in a pervasive computing environment through the use of a centralized Data Management System (DMS) (col. 2, lines 42-47). The DMS architecture is based on a PFVL paradigm (col. 10, lines 25-27), wherein objects inside the DMS can be classified according to five basic attributes: PACKAGE, VARIANCE, LEVEL, FILETYPE, and VERSION (col. 10, lines 39-56).

Claim 1 has been amended to more clearly define that the VCR represents a plurality of content repositories logically as a single content repository from the application program's viewpoint. Although Van Huben discloses a complex data directory comprised of multiple sub-repositories (col. 14, lines 9-33), the complex data directory does not appear to be a virtual content repository that represents the multiple sub-directories logically as one single content repository from the application program's viewpoint.

Claim 1 has also been further amended to more clearly define the data structure as including or referring to a reference to a parent data structure. It is respectfully submitted that this feature is also not disclosed by Van Huben. Although Van Huben discloses that Packages may be embedded within a higher level Package (figure 3A and col. 11, lines 1-12), the

Packages embedded within a higher level Package do not appear to include a reference to the parent Package.

In view of the comments provided above, Applicant respectfully submits that the embodiment defined by Claim 1 is neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

#### Claim 17

Claim 17 has been amended by the current Response to more clearly define the embodiment therein. As amended, Claim 17 defines:

17. *(Currently Amended) A memory for storing virtual content repository (VCR) information for access by an application program being executed on a computer system, comprising:*  
*a data structure stored in said memory, the data structure including:*  
*a root node;*  
*a first set of nodes wherein each node in the first set can be hierarchically related to at least one other node in the first set, and wherein all nodes in the first set are hierarchically inferior to the root node;*  
*a second set of nodes associated with the first set of nodes, wherein the second set of nodes provides schema information for the first set of nodes;*  
*wherein the VCR represents a plurality of content repositories logically as a single content repository from the application program's viewpoint;*  
*wherein each one of the first set of nodes has an identifier that indicates its logical location in the hierarchy formed by the first set of nodes;*  
*wherein each one of the first set of nodes can represent one of: 1) a node container; 2) repository content; and 3) a repository; and*  
*wherein each one of the first set of nodes can be associated with the at least one property.*

Claim 17 has been amended to more clearly define the embodiment as a memory for storing virtual content information comprising a data structure including a first set of nodes. Each one of the first set of nodes has an identifier that indicates its logical location in the hierarchy formed by the first set of nodes. The virtual content repository represents a plurality of

content repositories logically as a single content repository from the application program's viewpoint. Applicant respectfully submits that these features are not disclosed by the cited references.

It is respectfully submitted that Van Huben does not disclose that a virtual content repository represents a plurality of content repositories logically as a single content repository from the application program's viewpoint. Although Van Huben discloses a complex data directory comprised of multiple sub-repositories (col. 14, lines 9-33), the complex data repository does not appear to represent the multiple sub-repositories in the complex data directory logically as one single content repository from the application program's viewpoint.

Furthermore, it is also respectfully submitted that Van Huben also does not appear to disclose that each one of the first set of nodes has an identifier that indicates its logical location in the hierarchy formed by the first set of nodes. Van Huben discloses that Packages may be embedded within a higher level Package (figure 3A and col. 11, lines 1-12). However, the Packages do not appear to include an identifier that indicates its logical location in the hierarchy. Van Huben also discloses a complex data directory comprised of multiple sub-repositories (col. 14, lines 9-48), where the sub-directories could be a hierarchical file directory. However, nodes in a hierarchical file directory disclosed in Van Huben also do not appear to have an identifier that indicates its logical location in the hierarchy.

In view of the comments provided above, Applicant respectfully submits that the embodiment defined by Claim 17 is neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

#### **Claim 37**

Claim 37 has been amended by the current Response to more clearly define the embodiment therein. As amended, Claim 37 defines:

37. *(Currently Amended) A memory for storing data for access by an application program being executed on a computer system, comprising:*
- a first object to provide a first group of services related to interacting with a hierarchical namespace;*
  - a plurality of second objects to provide a second group of services related to associating information with the first object;*
  - a plurality of third objects to provide a third group of services related to describing attributes of the plurality of second objects;*

*wherein the first object is logically part of a virtual content repository (VCR) and includes a reference to a parent object, and wherein the VCR represents a plurality of content repositories logically as a single content repository from the application program's viewpoint.*

Claim 37 has been amended to more clearly define the embodiment as comprising a first object to provide a first group of services related to interacting with a hierarchical namespace that includes a reference to a parent object. The first object is also logically part of a virtual content repository. The virtual content repository represents a plurality of content repositories logically as a single content repository from the application program's viewpoint. Applicant respectfully submits that these features are not disclosed by the cited references.

Claim 37 has been amended to more clearly define that the virtual content repository represents a plurality of content repositories logically as a single content repository from the application program's viewpoint. Although Van Huben discloses DMS MANAGERS that can span several layers, DMS MANAGERS are not content repositories. Instead, DMS MANAGERS are comprised of a plurality of functions (col. 12, lines 7-8).

In addition, Claim 37 has also been amended to more clearly define that the first object includes a reference to a parent object. It is respectfully submitted that this feature is not disclosed in Van Huben.

In view of the comments provided above, Applicant respectfully submits that the embodiment defined by Claim 37 is neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

#### **Claim 9**

The comments provided above with respect to Claim 1 are hereby incorporated by reference. Claim 9 has been similarly amended to more clearly define the embodiments therein. For similar reasons as provided above with respect to Claim 1, Applicant respectfully submits that Claim 9, as amended, is likewise neither anticipated by, nor obvious in view of the cited references. Reconsideration thereof is respectfully requested.

#### **Claims 2, 4-8, 10, 12-16, 20-27, 38-42, and 44-48**

Dependent Claims 2, 4-8, 10, 12-16, 20-27, 38-42, and 44-48 are not addressed separately, but it is respectfully submitted that these claims are allowable as depending from an allowable independent claim and further in view of the additional limitations of these claims.

Applicant respectfully submits that Claims 2, 4-8, 10, 12-16, 20-27, 38-42, and 44-48 are similarly neither anticipated by, nor obvious in view of, the cited references, and reconsideration thereof is respectfully requested. It is also respectfully submitted that these claims also add their own limitations which render them patentable in their own right. Applicant respectfully reserves the right to argue these limitations should it become necessary in the future.

**Claims 3, 11, 18-19, 28-36, 43, and 49**

Claims 3, 11, 18-19, 28-36, 43, and 49 have been canceled by the current Response, rendering moot the rejections of these claims. Applicant respectfully reserves the right to prosecute the canceled claims in a continuing or future application.

**VII. Conclusion**

In light of the above, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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